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COMMITTEE: EL-002 Safety of Household and Similar Electrical Appliances and Small Power Transformers

DR 24014 CP

# DRAFT

# COMBINED POSTAL BALLOT/ AUSTRALIAN / NEW ZEALAND STANDARD FOR COMMENT

LIABLE TO ALTERATION DO NOT USE AS A STANDARD

DATE OF ISSUE: CLOSING DATE FOR COMMENT: 23 May 2024 18 July 2024

DR 24014 CP

# AS/NZS 60335.2.98:2024

# Household and similar electrical appliances – Safety –

Part 2.98: Particular requirements for humidifiers





# COMBINED DRAFT FOR COMMENT/POSTAL BALLOT STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers

# DRAFT Australian/New Zealand Standard

# Household and similar electrical appliances – Safety –

Part 2.98: Particular requirements for humidifiers

Please note that this document is currently being voted by the committee and the results of the postal ballot will be contingent on public comment received.

Comment on the proposal is invited from persons and organizations concerned with this subject.

Attention is drawn to the fact that this document is a draft only and is liable to alteration in the light of comment received. It is not to be regarded as an Australian/New Zealand Standard until finally issued as such by Standards Australia and Standards New Zealand.

# NOTES OF THE SECRETARY:

THE INTRODUCTION OF ANY NATIONAL VARIATIONS TO BE INCLUDED IN THIS STANDARD WILL OCCUR AFTER THE PUBLIC COMMENT HAS BEEN CONSIDERED AND PRIOR TO THE PUBLICATION OF THE STANDARD.

THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH IEC 60335-2-98 ED 3, COPIES OF WHICH MAY BE VIEWED BY CONTACTING enquiries@standards.govt.nz.

# AS/NZS 60335.2.98:2024

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL 002 - Safety of household and similar electrical appliances and small power transformers. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on xxxxxxxx and by the New Zealand Standards Approvals Board on xxxxxxxx. It was published on xxxxxxxx.

The following interests are represented on Committee EL-002

Association of Accredited Certification Bodies

Australian Industry Group

Australian Retailers Association

Better Regulation Division (Fair Trading, Safework NSW, TestSafe)

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers' Federation of Australia

Electrical Regulatory Authorities, Australia

Electrical consultants

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National Retailers Association (Australia)

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For more information about joint standards, visit www.standards.govt.nz or www.standards.org,au.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national standards organisation.

We also welcome suggestions for improvement in our standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comment to either the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the title page.

This standard was issued in draft form for comment as DR 24014 CP.

# AS/NZS 60335.2.98:2024 (IEC 60335-2-98 ED 3, AU:MOD NZ: IDT)

Australian/New Zealand Standard™

Household and similar electrical appliances – Safety –

Part 2.98: Particular requirements for humidifiers

# (IEC 60335-2-98 ED 3, AU:MOD NZ: IDT)

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#### STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

#### AS/NZS 60335.2.98:2024

# HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

### SAFETY -

#### Part 2.98: Particular requirements for humidifiers

# Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002 - Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 60335.2.98:2005 three years from the date of publication of this Standard. During this period AS/NZS 60335.2.98:2005 and its amendments will also remain current. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand.

The text of IEC 60335-2-98 ED 3, prepared by IEC Technical TC 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

The principal changes in this edition as compared with the 2005 edition of AS/NZS 60335.2.98 are as follows (minor changes are not listed):

- a) alignment with AS/NZS 60335.1:2022;
- b) additional requirements for a humidifier shaped or decorated like a toy (7.12, 8.1.1, 21.101, 22.12, 22.44, 22.54, 22.105);
- c) additional requirements are included for the temperature of accessible surfaces (11.8);
- d) application of test probes 18 and 19 has been introduced (Clause 8, 20.2, B.22.3, B.22.4);
- e) additional guidance is provided for humidifiers for remote operation.

This Standard is an adoption with national modifications of the third edition of IEC 60335-2-98, *Household and similar electrical appliances – Safety – Part 2-98: Particular requirements for humidifiers.* It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 60335.1 *Household and similar electrical appliances – Safety – Part 1: General requirements* and its Amendments, unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of AS/NZS 60335.1:2022.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 60335.1 so as to convert it into the Australian/New Zealand Standard: Safety requirements for humidifiers.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.
- NOTE 2 The following print types are used:
- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and associated noun are also in bold.

p NOTE 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

The essential safety requirements in AS/NZS 3820<sup>1</sup> that could be applicable to requirements for humidifiers are covered by this standard.

The national variations to IEC 60335-2-98 ED 3 form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

<sup>&</sup>lt;sup>1</sup> AS/NZS 3820 Essential safety requirements for electrical equipment

The text of the International Standard IEC 60335-2-98 ED 3 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

#### **AUSTRALIAN NATIONAL VARIATIONS**

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2022.

### 1 Scope

In the six paragraph *insert* the following variation.

 additional requirements for evaporative coolers intended for installation in Australia are given in Annex ZAU.

#### 2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

AS 1530.8.1, Methods for fire tests on building materials, components and structures Part 8.1: Tests on elements of construction for buildings exposed to simulated bushfire attack—Radiant heat and small flaming sources

AS 1682.1, Fire dampers Part 1: Specification

#### Annexes

Replace the text by the following:

The annexes of Part 1 are applicable except as follows.

# Annex ZAU

# (normative)

# Evaporative coolers for installation in Australia

The requirements in the main part of this standard along with the following additions to this standard are applicable to Evaporative coolers intended to be installed in Australia

#### 3 Terms and definitions

#### 3.5 Definitions relating to types of appliances

Addition:

#### 3.5.A301

#### fire damper

movable closure in a duct or opening for the passage of air, which operates automatically to restrict the passage of fire or products of combustion past it

Note 1 to entry The term fire damper includes smoke damper.

#### 5 General conditions for the tests

#### 5.5 Addition:

For evaporative coolers supplied with a **fire damper**, the tests shall be conducted with the **fire damper** in the open position.

#### **5.7** Addition:

For evaporative coolers, the tests of Clauses 10, 11 and 13 are carried out at an ambient temperature of 40 °C  $\pm$  2 °C.

#### **5.9** Addition:

If a **fire damper** is required for the evaporative cooler to comply with this standard the **fire damper** shall be installed in accordance with the evaporative cooler's installation instructions.

# 7 Marking and instructions

#### 7.12.1 Addition:

For fixed evaporative coolers the instructions shall include the substance of the following:

WARNING: If this evaporative cooler is installed in a BAL-12.5 to 29 area the evaporative cooler dropper duct and flashings shall be adequately sealed at the roof to prevent gaps greater than 3mm. The dropper duct and flashings shall be non-combustible.

If a **fire damper** is required for the evaporative cooler to comply with this standard the instructions shall include:

- The substance of the following warning:

WARNING: If this evaporative cooler is installed in a BAL-12.5 to 29 area the evaporative cooler must be installed using XXX model YYY brand **fire damper** kit;

- Details of where to purchase the relevant fire damper; and
- Details of how to install the required **fire damper**.

#### 11 Heating

**11.8** Addition:

The temperature rise limits for evaporative coolers in Table 3 are reduced by 15 K

# 19 Abnormal operation

**19.A301** *Fixed evaporative coolers* incorporating or being supplied with *fire dampers* are operated under the conditions of Clause 11. The *fire damper* is put in the closed position.

**19.A302** *Fixed evaporative coolers* are tested under the conditions of AS 1530.8.1 with all accessories installed as per the installation instructions. The appliance is tested in the off position and the water tank is empty.

After this test if ignition of the evaporative cooler has occurred no material from the evaporative cooler shall breach the **fire damper** system.

After this test if ignition of the evaporative cooler has not occurred it is deemed that the evaporative cooler is able to be used in BAL-12.5 to 29 areas without a **fire damper**.

# 22 Construction

**22.A305** For a fixed evaporative cooler, if a **fire damper** is required to comply with this standard, components and fittings that form part of the **fire damper** other than the **fire damper** itself shall be constructed from metal.

Compliance is checked by inspection.

# 24 Components

**24.1.A301** Fire dampers shall comply with AS 1682.1. If the fire damper operates during clause 11 it is subjected to 10 000 cycles of operation at an ambient temperature of 40 °C  $\pm$  2 °C prior to the tests of clause 19.A302.

6

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 60335.1:2022.

# Annex ANZ (normative)

# Normative references to international publications with their corresponding joint Australia/New Zealand publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by national variations the relevant joint Australia/New Zealand publications applies if the national variations are needed to ensure the safety of the appliance for Australia/New Zealand conditions. These international publications are indicated by (mod). If an international publication is not so indicated, then either it or the listed Australia/New Zealand publication may be used. Where there is no equivalent international publication listed to a listed Australia/New Zealand publication, then the Australia/New Zealand publication applies

<b>Publication</b>	<u>Year</u>	<u>Title</u>	AS/NZS	<u>Year</u>

IEC 60584-1

Thermocouples – Part 1: EMF specifications and tolerances

NOTES

### **Standards Australia**

Standards Australia is an independent company, limited by guarantee, which prepares and publishes most of the voluntary technical and commercial standards used in Australia. These standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth government, Standards Australia is recognised as Australia's peak national standards body.

#### **Standards New Zealand**

The first national standards organisation was created in New Zealand in 1932. The New Zealand Standards Executive is established under the Standards and Accreditation Act 2015 and is the national body responsible for the production of standards.

# Australian/New Zealand Standards

Under a Memorandum of Understanding between Standards Australia and Standards New Zealand, Australian/New Zealand standards are prepared by committees of experts from industry, governments, consumers, and other sectors. The requirements or recommendations contained in published standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian/New Zealand standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

# International involvement

Standards Australia and Standards New Zealand are responsible for ensuring that the Australian and New Zealand viewpoints are considered in the formulation of international standards and that the latest international experience is incorporated in national and joint standards. This role is vital in assisting local industry to compete in international markets. Both organisations are the national members of ISO (the International Organization for Standardization) and provide the secretariat to their respective national committees of the IEC (the International Electrotechnical Commission).

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